UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,215	12/29/2000	Hyon Chang Lim	0630-1203P	6996

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EXAMINER
LEZAK, ARRIENNE M

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9 and 12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-9 and 12* is/are rejected.   .

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Examiner notes that Claims 1, 4, 7, 9 & 12 have been amended, no Claims have

been added and Claims 2, 3, 10, 11, 13 & 14 have been cancelled. Claims not explicitly

addressed herein are found to be addressed within prior Office Action dated 1

December 2005 as reiterated herein below.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in which the invention
> was made.

2.   Claims 1, 4-9 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable

over extensive consideration of US Patent US 6,516,350 B1 to Lumelsky in view of US

Patent US 6,484,257 B1 to Ellis.

3.   Regarding Claims 1, 4-9 & 12, Lumelsky teaches a method and apparatus of

maximizing the number of sessions according to an oerating situation of a server for a

multimedia service in a network environment in which a server and a plurality of clients

are connected with each other and the server, (comprising an application program, an

OS and a network connection - per pending Claim 5), dynamically decides whether to

provide or not provide multimedia service sessions according to a request of a client,

(Abstract), comprising:

- a service requesting step in which one of a plurality of clients

  requests a multimedia service from the server, (Col. 15, lines 32-

  40);

- a capability negotiation step comprising a management capability,

  (per pending Claim 8), (Col. 5, lines 12-36), for (1) evaluating an

  available amount of a CPU and a memory of the server, (Fig. 10;

  Col. 12, lines 26-52; Col. 15, lines 32-67 and Col 16, lines 1-22);

- (2) evaluating an available amount of a bandwidth of a network

  connecting the server and the clients, (Fig. 10; Col. 12, lines 26-52;

  Col. 15, lines 32-67 and Col 16, lines 1-22);

- (3) evaluating an available amount of a CPU and a memory of the

  one client, (Fig. 10; Col. 12, lines 26-52; Col. 15, lines 32-67 and

  Col 16, lines 1-22);

- in which it is evaluated whether the server is to generate a session

  to provide a multimedia service according to the request by the one

  client, (Col. 15, lines 32-67 and Col 16, lines 1-22), (Examiner

  notes that the generation of a new session by a server, for any

  particular client or number of clients, would have been obvious in

  light of the teachings of Lumelsky as a means by which any

  client(s) on the network would have access to any network

resource(s) on request, per adaptive resource management, (Col.
5, lines 7-10));

- generating the new session in case that the resources of the
server, the one client and the network are available after being
evaluated, (Fig. 10; Col. 12, lines 26-52; Col. 15, lines 32-67 and
Col 16, lines 1-22);

- service providing step in which the server provides a multimedia (or
text – per pending Claim 6) service to one of the clients through the
capability negotiation, (Col. 15, lines 32-67 and Col 16, lines 1-22);
and

- wherein the number of sessions according to the operating situation
of a server for a multimedia service in a network environment is
maximized, (Fig. 10; Col. 12, lines 26-52; Col. 15, lines 32-67 and
Col 16, lines 1-22), (Examiner notes that per Applicant's
specification, p. 6-8, the server can effectively provide multimedia
service at the "maximum" of the sessions based upon the capability
negotiation as noted herein above. As the prior art clearly and
obviously teaches each and every capability negotiation step, by
default, the prior art would teach effectively providing multimedia
service at the "maximum" of the sessions, per Applicant's definition
of the same).

4.   Examiner notes that Applicant has added claim language indicating that the service providing step is performed "without predetermining the number of sessions provided by the server to clients", and Examiner finds that Lumelsky does not require "predetermining the number of sessions" for any purpose, and as such obviously reads upon Applicant's amended claim language. Lumelsky specifically relies on the use of policies to make determinations, (Lumelsky – Col. 5, lines 37-48), which policies could be any policies used in capability negotiation, and which capability negotiation is well-known to be determined in a plethora of different ways, thus, not specifically requiring the predetermination of session number for the same.

5.   That noted, Examiner additionally provides the Ellis reference which teaches the determination of a new session based on current available processor bandwidth, (Ellis – Col. 7, lines 11-67; Col. 8, lines 1-26; & Claims 1-10), wherein a determination based on current available processor bandwidth is not equivalent to a determination based on a predetermination of the number of sessions provided by the server to clients, and as such, renders Applicant's claims unpatentable. Additionally, Examiner notes that Ellis clearly provides for the determination of a "new session", as noted herein above. The motivation to combine Lumelsky and Ellis is found within Lumelsky which notes a need for a coordinated management of overall system resources as a function of request activities for individual content and computing resources, (Lumelsky – Col. 4, lines 56-65 & Col. 5, lines 22-25). Clearly Ellis provides a specific means by which processor resources and client requests are determinative of new session generation via a

management functionality, which specific means is obviously representative of a

policy/property, as noted within Lumelsky.

6.   Examiner further notes that Ellis further teaches a service session refusal step

wherein the server refuses to generate a new session if the allocated resources are not

receivable even in one of the capability negotiation steps (1)-(3), (Ellis - Col. 7, lines 11-

67; Col. 8, lines 1-26; & Claims 1-10). Examiner additionally finds that Ellis clearly

teaches wherein insufficient resources determine acceptance of new client sessions,

and thus, in light of the fact that those factors relied upon by Applicant for said

determination are all well-known and necessary resources, Examiner finds that the

absence of any individual resource would obviously create an "insufficient resource"

situation thereby denying acceptance of a new client session. Thus Claims 1, 4-9 & 12

are found to be unpatentable over the combined teachings of Lumelsky and Ellis.

Response to Arguments

7.   Applicant's arguments filed 29 March 2006, have been fully considered but they

are not persuasive. Applicant's arguments do not comply with 37 CFR 1.111(c)

because they do not clearly point out the patentable novelty which he or she thinks the

claims present in view of the state of the art disclosed by the references cited or the

objections made.

8.   Applicant's arguments include the failure of previously applied art to expressly

disclose "a service requesting step in which one of the plurality of client requests a

multimedia service from the server". It is evident from the detailed mappings found in

the above rejection(s) that Lumelsky discloses this functionality, as Examiner notes that

the "service control plane" (SCP) is obviously a computer resource, (per its various

negotiating and processing capabilities), and as such would obviously be read to be

incorporated within a server environment, particularly in this case wherein Lumelsky

teaches the SCP providing control and management of the server-side resources.

Further, it is clear from prior art that server-side load-balancing and redirection was

widely implemented in the networking art and further incorporates software capable of

being implemented on a single server or any number of servers in a group which server,

(or group of servers) would obviously be capable of receiving and negotiating requests

from any number of clients. Thus, Examiner finds, (per Fig. 4), that the SCP can be

incorporated within any server and still perform its designated functionalities, which

functionalities clearly render Applicant's invention obvious. Thus, Applicant's arguments

drawn toward distinction of the claimed invention and the prior art teachings on this

point are not considered persuasive.

9.   Examiner has addressed Applicant's arguments regarding the generation of a

"new session" as noted herein with regard to the combined teachings of Lumelsky and

Ellis. Additionally, Examiner notes that Applicant's additional limitation of session

generation "without predetermining the number of sessions provided by the server to

the clients" simply allows any teachings which perform the same functionality, (session

generation), by an alternate means, (i.e.: bandwidth determination), to read upon and

overcome Applicant's claims as written. Moreover, Examiner notes that nowhere in

Applicant's amendment has Applicant indicated that Lumelsky specifically performs the

functionality of session negotiation/generation by means of predetermining the number of sessions provided by the server to the clients, and as such, Applicant has not shown that Lumelsky does not read on Applicant's claims as amended.

10.   Regarding Applicant's argument that the prior art does not teach "maximizing the number of sessions according to the operating session of a server", Examiner again notes that per Applicant's specification, p. 6-8, the server can effectively provide multimedia service at the "maximum" of the sessions based upon the capability negotiation as noted herein above. As the prior art clearly and obviously teaches each and every capability negotiation step, by default, the prior art would teach effectively providing multimedia service at the "maximum" of the sessions, per Applicant's definition of the same. Additionally, Applicant is reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, as noted herein, the combined prior art teachings are clearly, obviously and by default, capable of performing the intended use of "providing multimedia service at the "maximum" of the sessions according to the operating session of a server", and thus read upon Applicant's claimed invention rendering the same unpatentable.

11.   In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

1986). Examiner again emphasizes that it is the combined teachings of Lumelsky and

Ellis that clearly and obviously render Applicant's claimed invention unpatentable.

12.   In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine,* 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as noted herein,

Examiner has provided proper and sufficient motivation for combining the references.

13.   In response to applicant's argument that the Office Action does not explain how

Lumelsky is to modified, the test for obviousness is not whether the features of a

secondary reference may be bodily incorporated into the structure of the primary

reference; nor is it that the claimed invention must be expressly suggested in any one or

all of the references. Rather, the test is what the combined teachings of the references

would have suggested to those of ordinary skill in the art. See *In re Keller,* 642 F.2d

413, 208 USPQ 871 (CCPA 1981). In this case, Examiner finds that one of ordinary

skill in the art would have known to incorporated the Ellis features into the Lumelsky

system, per the motivation noted herein.

14.   In response to applicant's argument that the examiner's conclusion of

obviousness is based upon improper hindsight reasoning, it must be recognized that

any judgment on obviousness is in a sense necessarily a reconstruction based upon

hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does

not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971). In this case, Examiner finds that one of ordinary skill in the art would have known

to incorporated the Ellis features into the Lumelsky system, per the motivation noted

herein.

15.   Examiner has addressed Applicant's Amendment, and has further rejected all

claims, as noted herein above. Applicant's amendment necessitated the new ground(s)

of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE**

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy

as set forth in 37 CFR 1.136(a).

16.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.
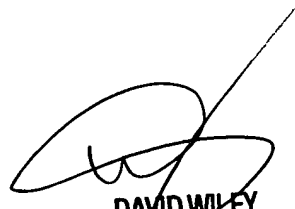
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Arrienne M. Lezak
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AML

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